Over the Hump

By Paula Allman, Fort Rucker, Ala.

THE NEED FOR SAFETY IN COMBAT

Safety professionals report that in spite of today's emphasis on safety by top leadership, there is still a perception among some young leaders that safety is something you have to consider in peacetime missions; but in wartime, safety becomes a luxury. If that is true, and if it is also true that when things get tough, the first things to go are the luxuries — then when war comes, we can no longer afford safety. The question really is, *"Can we afford not to consider safety during wartime?"*

One military officer who recognized the importance of safety in aviation operations was General William H. Tunner. General Tunner was responsible for the India-China airlift in the last year of World War II. General Tunner gives us an excellent example of how a vigorous safety program actually did work in a combat theater, and how safety made a difference in the success of the mission.

In his lively memoir, "Over the Hump," General Tunner recalls his stint as commander of the crucial India-China airlift and tells of his experiences during one of the first attempts to supply the Army by air.

In the 1940s, the very concept of military airlift was in its infancy. In fact, the India-China airlift had only been reluctantly called into existence by a ground-oriented command because a deadly combination of Japanese and geography made the better-known Burma Road somewhat less than efficient.

The purpose of the airlift was to carry enough supplies into Western China to keep the Chinese in the war. A Chinese military presence tied down approximately two million Japanese troops — troops that otherwise could be used against U.S. forces in the Pacific.

When General Tunner arrived in India in the summer of 1944, the airlift had been in operation about 2 years. Its performance was

graphic composite by SSgt Carrie Atwood

tons flown into China, three Americans died.

As General Tunner put it: *"Not only was the accident rate alarming, but most of the accidents were washouts — total losses with planes either flying into mountain peaks or going down in the jungle. In many of the cases in which there was reason to believe that some or all crew members had been able to parachute from their planes, the men were never seen again. The jungle had simply swallowed them up. The combination of a high accident rate with the hopelessness of bailing out was not conducive to high morale in the flying crews."*

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barely adequate in terms of tonnage transported, but the major problem was safety.

General Tunner described the situation: *"Here, in a strange land far from home, on the fringes of a mysterious backward civilization, were all the conditions that bring hazardous flight: fog, heavy rain, thunderstorms, dust storms, high mountains, a necessity for oxygen, heavy loads, sluggish planes, faulty or no radio aids, hostile natives, jungles, and one-way airfields set in mountainous terrain at high altitude."*

As tonnage had gradually increased during the airlift's operation, so did the mishap rate. In January 1944, the accident rate was 1.97 per 1,000 flying hours! Every 200 trips over the Hump cost one airplane; for every 100

General Tunner soon identified a major problem: *"All efforts up to that point had concentrated on increasing tonnage, the prime indication of mission success. But all consideration for safety had been ignored."*

Night flying had been introduced on the Hump, although radio communication and navigational facilities were nonexistent except at the terminals. Weather conditions were virtually ignored; the common saying was, "There is no weather on the Hump." Many planes flew in violation of standard Air Corps specifications. As one report indicated: *"If Air Corps technical orders were now in force, I doubt that there would be an airplane in the air."*

General Tunner's challenge became immediately clear: increase tonnage and lower the accident rate, seemingly contradictory actions in a wartime environment. Yet the record shows the two were not at odds at all. By instituting a safety program that seems obvious to us today, it became possible to change the whole tenor of the airlift.

What was the Program?

Nothing more than the basics distilled into four main points:

- Analysis of existing flight and maintenance procedures and practices
- Statistical investigation and analysis of accidents
- Recommendations for the correction of faults revealed in the foregoing analysis
- Statistical investigation and analysis of accidents

In particular, General Tunner and his staff carefully investigated the training of the pilots and made up for any gaps before sending them over the Hump. They began to take weather and communications seriously (there *was* weather on the Hump), attacking such conditions as icing and turbulence and becoming more familiar with navigational equipment and how best to deal with its absence.

Another major area was one we hear much more about today, particularly in the area of human factors — pilot discipline. General Tunner was very specific about the use and importance of the checklist, an aid which told the pilot "the exact procedure he must follow from the time prior to starting the engine to that following his cutting it off at his destination." We found planes without checklists and pilots who didn't bother. Both situations had to be corrected.

Briefing and debriefing, according to General Tunner, lay at the heart of the program: *"Briefing and debriefing proved to be of the greatest importance. Briefing involved not only a thorough preparation of the pilot for the route he was to take, but a check to make certain that the crew was competent to make the proposed flight safely. Debriefing would show up incompetent flight procedures, indicating the need for corrective action and additional training. Debriefing also provided our best weather reports."*

Did all of this work?

In August 1944 (just before General Tunner's arrival), they airlifted 23,000 tons over the Hump to China with an accident rate hovering around 2.0 per 1,000 flying hours. In January 1945, with close to 40,000 tons airlifted, the accident rate dropped to 0.301. By July 1945, total tonnage jumped to 71,042 with an accident rate of 0.239. During August, the final big month of the airlift, 20 planes were lost during 136,000 flying hours, bringing the accident rate down to 0.154 per 1,000 flying hours.

General Tunner makes the statistics come to life by looking at them another way: *"If the high accident rate in 1943 and early 1944 had continued, along with the great increase in tonnage delivered and hours flown, America would have lost not 20 planes that month, but 292, with a loss of life that would have shocked the world."*

Serious military airlift was born in this distant theater on the almost forgotten edge of the 20th century's greatest war. Along with it, however, came safety. Can we afford the luxury of a safety program during wartime? History tells us we can't afford not to have one. We simply can't get the job done without it.

Editor's Note: *Portions of this article on the India-China airlift were taken from General Tunner's lively memoir, "Over the Hump," republished later by Richard W. Huling, Ph.D., AFISC Historian. Courtesy U.S. Army Safety Center*